

System Configuration Team (SCT)

Reasonable & Prudent Measure #26

Meeting Notes

September 16, 1998

I. Greetings and Introductions.

The September 16 meeting of the System Configuration Team was held at the National Marine Fisheries Service's offices in Portland, Oregon. The meeting was co-chaired by Bill Hevlin of NMFS and Jim Ruff of the Northwest Power Planning Council staff. The meeting was facilitated by Regional Forum facilitator Donna Silverberg. The agenda and a list of attendees for the September 16 meeting are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced may be too lengthy to routinely include with the meeting notes; copies of all enclosures referred to in the minutes are available upon request from Kathy Ceballos of NMFS at 503/230-5420.

II. FFDRWG Updates.

Rock Peters of COE said the only FFDRWG-related item to report is that the next meeting of this group will be held Thursday, September 24 in Portland. Rebecca Kalamasz said a Walla Walla FFDRWG meeting will be scheduled for the week of October 21, following the release of the ISAB's report on surface collection. Peters added that the Corps' 1998 annual research review is now set for the week of October 13-15; an agenda for this meeting will be distributed in the next few days. Ron Boyce requested that the Corps furnish a list of the FY'99 AFEP research items the Corps intends to fund, together with budgets for each project. Witt Anderson referred Boyce to the last two pages of Enclosure C, the package containing Lower Granite SBC FY'99 options and costs, McNary, Lower Granite and Little Goose screens FY'99 options, and the CRFM FY'99 AFEP cost roll-up for the Corps' Portland and Walla Walla Districts. After a few minutes of discussion, Boyce reiterated his request for a more detailed itemized list of individual research projects within each of these more comprehensive program items – I'm talking about the 100 or so research projects we reviewed in July, Boyce said. Ultimately, Peters agreed to provide this list for Portland District research projects; Boyce said the list already furnished by Walla Walla District is adequate.

III. Continuation of Process to Priority Rank FY'99 CRFM Program Activities.

The main item of business today is to work on the spreadsheet showing the current SCT rankings for FY'99 CRFM activities, Hevlin said. Two things have changed since the last time we discussed this, he said; first, the Corps has now provided the unbundled "breakout" list of items requested at the last SCT meeting. I thought it might be a good idea to spend a few minutes discussing this breakout list, so that everyone is clear about the funding nuances it contains, Hevlin said. Once that information has been digested, we can go back to the ranking

sheet and discuss the relative rank of individual line-items. The group spent a few minutes discussing the goal of today's meeting, ultimately agreeing that the SCT should develop a ranked list of projects as soon as possible. Jim Ruff also requested that the group have some discussion about why the rankings of certain items changed at the last SCT meeting; it was agreed to tackle this as the first order of business after the "unbundling" discussion.

Mike Mason led a discussion of Enclosure C, beginning with the second page, covering FY'99 McNary, Little Goose and Lower Granite screen options. He explained that the Corps had gone through this list of activities and, particularly for McNary, had identified a number of less-critical activities that can be deferred until next year (see Enclosure C for details). That leaves \$2.37 million for items we consider critical, he said.

The group spent a few minutes going through the list of critical, non-deferrable activities at McNary, discussing the status and content of the systemwide screen report, the orifice shelter design and orifice shelter evaluations. Rainey said the screen report and the orifice shelter design

in particular need further discussion at FFDRWG; at this point, he said, they really isn't something NMFS is ready to support. It was agreed to add this item to the next FFDRWG agenda; until that discussion occurs, said Hevlin, NMFS is unsure whether we would support these items as critical activities that cannot be deferred. In response to a question from Mark Lindgren, Rainey said NMFS has both engineering and biological concerns about the orifice shelters. Mason expressed the Corps' concern that these activities have already been approved, then deferred; in the meantime, the Corps is spending nearly \$500,000 per year on short-term debris removal contracts. We would prefer to put that money where it belongs, in a long-term solution, and would prefer to keep these items moving forward, he said.

Other SCT participants weighed in on the list of critical FY'99 activities at McNary; Rod Woodin of WDFW questioned whether the hydroacoustic FGE evaluation is critical for FY'99. It's information we desire, he said, but I'm not sure it's critical. Kalamasz replied that this item was included on the "critical" list at NMFS' urging. After some minutes of discussion, Kalamasz said she would fax over the relevant reports concerning the results of the outlet flow control evaluations, so that the SCT could review them over lunch in the hopes of making an SCT decision on this item today (this information is attached as Enclosure D).

Rainey questioned the need to include the cylindrical dewatering pilot test on the McNary critical list; after some minutes of discussion, it was agreed to leave this on the critical list for now, because the Corps views it as critical to both long-term debris control and long-term cost control.

The group then discussed the "less-critical activities" list for McNary; Woodin asked why the equipment purchase for long-term forebay debris removal is being recommended for deferral. In response to a question, the Corps' Kevin Cruise said that, if this item was funded in FY'99, the first two items on the "critical" list (short-term debris removal contracts and project support for debris control) would be eliminated or substantially reduced. So over two or three years, the long-term debris removal equipment would pay for itself, but we could save money in the short term if we defer it? Ruff asked. That's correct, was the reply. Ruff said that, if Congress appropriates \$95 million for the CRFM program in FY'99, he is willing to support the long-term debris removal equipment purchase; if Congress appropriates a lesser amount, he said, I would

prefer to spend the lesser amount for short-term contracts and project support. No SCT disagreement was raised to this suggested resolution.

Moving on to the “critical activities” list for Little Goose and Lower Granite, Jim Ceballos asked whether, because the screens at Little Goose have been in the water for a year less than the screens at Lower Granite, the replacement of the limit switches can be deferred for another year. The problem is that these switches have never worked properly from day one, Mark Lindgren replied; in addition, two contracts are always more expensive than one, and there is some economy in taking care of both projects at the same time.

In general, when we talk about extended screens in the Walla Walla District, are costs going to continue for these items every year, as they have been, or are we finally going to reach closure on these projects? Hevlin asked. Yes, we are, Mason replied – the objective of all of this is to remove e-screens at Lower Granite, Little Goose and McNary from the construction general budget. Their operation and maintenance will be covered by Corps’ O&M funds, he added.

The discussion then moved on to the Lower Granite surface bypass FY’99 options and costs (page 1 of Enclosure C). Three options have been identified, Mason explained; Option 1 is no test in FY’99, just fixed costs that carry over from FY’98 (total cost: \$1.25 million). Option 2 essentially includes a test with some bells and whistles, plus the Option 1 (carryover) costs (total cost: \$4.14 million); Option 3 is the full-meal deal, with all of the modeling and evaluations the Corps feels are needed for this test. The total FY’99 cost of this option would be \$5.865 million. The main difference between Options 2 and 3 is that Option 2 is a spring test only, while Option 3 includes both spring and summer testing, plus the listed monitoring, evaluations and modeling.

The group spent a few minutes discussing the merits and detriments of each of these options. I guess the real question is, why wouldn’t we want to continue to test this system, to obtain information for the 1999 decision? Ruff asked. The group discussed the pending ISAB report on surface bypass; Ruff said that he has heard nothing, within his office, that would indicate that the ISAB is going to recommend no further testing of surface bypass systems.

The group discussed the applicability of the Lower Granite results to other projects in the system, agreeing that at least some of the results from this test would be applicable at all projects except Bonneville. Ed Bowles of IDFG said his agency is a little uncomfortable with what the results to date from this test are saying; lately we’ve been getting some mixed messages, he said, and I think that’s applicable as to whether or not we continue surface collector research at Lower Granite in 1999. I would prefer that the group reserve judgement on this item until the end of this month, when we can look at more conclusive results, he said. Ron Boyce said he would also like to have an opportunity to more fully digest the results from the summer 1998 test before making a recommendation on this issue; he said the salmon managers have scheduled a meeting for September 29 to discuss and interpret those results. Following that meeting, he said, I should be able to come back to SCT with a consolidated salmon managers’ recommendation on 1999 surface collector testing at Lower Granite.

Ultimately, Silverberg summarized this discussion by saying that, given the outstanding questions on this issue, it would be prudent to defer a decision on the FY’99 surface collection test at Lower Granite until a future SCT meeting. Will we foreclose any of our options for 1999

if we defer a decision for now? Boyce asked. After some minutes of discussion, the Corps agreed that all three options will remain viable as long as the SCT can come to a decision by October 21. At Witt Anderson's request, it was agreed that if the Corps needs to make a decision on some of the contracts associated with the surface collector test prior to October 21, a special SCT meeting will be convened.

With that, the discussion moved on to the list titled "Portland District 'Some or All' Breakouts" on Page 5 of Enclosure C. Rock Peters explained that this list includes two main gas abatement options. He said that Option 2 is the "full meal deal" listed under "Gas Abatement Study (\$4.75 million)" at the top of Page 5; Option 1, at \$1.83 million, excludes the numerical model development and the biological studies included under Option 2. Anderson said the ISAB will be submitting its report to the Council on October 14; presumably, he said, the ISAB will be weighing in on this issue. While I don't want to keep kicking this can down the road any longer than we have to, he said, the SCT may want to defer a decision on this issue until we see what the ISAB has to say. Peters said that, under Option 1, completion of the Gas Abatement Study is now scheduled for December 2000, rather than the end of 1999. He added that, if Option 2 is chosen, time is becoming critical; if we are to do the ROV and deep tank components of this study in 1999, he said, October 14 is right at the end of the drop-dead period.

Hevlin said it may not be necessary to wait for the ISAB's recommendations on this issue; the salmon managers and NMFS support Option 1. After some minutes of further debate, Hevlin summarized the outcome of this discussion by saying that the SCT will put Option 1 down on its spreadsheet, with an asterisk – we will revisit the funding for this item if the ISAB strongly recommends doing the numerical model and the biological studies, he said. I will investigate the possibility of the ISAB releasing its report prior to the October 14 Council meeting, given the critical timeline for this item, said Ruff.

The discussion moved on to Item 2 on the Portland District 'Some or All' list: the gas fastrack. We have identified two options under this item, Peters said; the first is aimed at getting gas abatement structures, in the form of additional or modified flow deflectors, in the river at McNary, Bonneville and Ice Harbor as soon as possible; this option would require \$2.327 million in FY'99. Fastrack Option 2 would add Lower Monumental model construction to that mix, at an additional cost of \$670,000 (total FY'99 cost: \$3.09 million).

In response to a question from Ruff, Peters said neither option includes any additional flow deflector installation in FY'99 – the costs listed above are for model testing and spill pattern evaluations, not construction. After some minutes of discussion, the SCT recommended that Option 2 be added as a line-item to the FY'99 CRFM spreadsheet.

The discussion then turned to the spill effectiveness line-item (ranked as the #7 priority in the current spreadsheet), specifically, whether it should be included under the gas fastrack umbrella, or whether it should be a separate line-item. The real question is whether or not we're supporting spill effectiveness as a high priority, Anderson said. After some minutes of discussion, it was agreed to keep spill effectiveness as a separate line-item.

Moving on to adult measures (Lower Columbia), the Corps' John Kranda went through the individual components contained within this line item; the total cost in FY'99 is expected to be \$2.05 million. Gary Fredricks suggested that the automated trash rakes component of this item (cost: \$600,000) be removed; ultimately, however, it was decided to keep the funding for this

suite of actions at \$2.05 million, at least as a placeholder.

The next item discussed was turbine passage survival; Kranda described the individual items included in this line item. No changes were made to the recommended FY'99 funding level for this item, although Woodin suggested that the SCT may want to consider splitting out the McNary tests component for separate prioritization; he further suggested that it would be appropriate to consider separating out the Bonneville MGR test and cam optimization components. It was agreed to consider this during the afternoon session.

Next, the group discussed The Dalles surface bypass; the Corps' Norm Tolonen described the individual components of this line-item. Ultimately, no changes were made to this bundle of items. Moving on to John Day surface bypass, Doug Clarke went through the items included in this \$2.14 million line-item; it was agreed to add a 24-hour John Day spill test (cost \$1.5 million) as a related, but separate, line-item.

Stuart Stanger led the discussion of the John Day ESBS and the John Day smolt monitoring facility; the latter item was re-bundled, with no change to overall funding level. Finally, the group discussed Bonneville surface bypass; it was agreed to defer everything except the B1 prototype second year testing and the project baseline behavioral tests (FPE). It was agreed to add an item called high-flow outfall at an FY'99 cost of \$900,000; the overall cost of this item was reduced from \$11.45 million to \$6.7 million.

After lunch, the group turned its attention to the SCT FY'99 CRFM spreadsheet. A lengthy discussion resulted in the following modified prioritizations; new items and any changes to the relative rank of a given item are noted.

Item/Rank Equiv. Score Cost (\$ million) Change in Rank/Reason Cumulative

Costs

1. (Tie) JDA

Drawdown

Study (S) 600 \$3.730 No change \$3.730

1. (Tie) SYS –

LSN Feasibility

Study (S) 600 \$4.25 N/C \$7.980

1. (Tie) IHB

Flow Deflectors

(I) 600 \$3.8 N/C \$11.78

1. (Tie) BON

PH2 DSM 600 \$21.9 N/C \$33,680

1. (Tie) SYS

payback 600 \$4.0 N/C \$37,680

1 (tie). JDA JBS

Monitoring/O&

M Safety (S) 600 \$1.1 Newly

unbundled item \$38.780

1. (Tie) LGR

Surface Bypass

(critical) (S) 600 \$1.25 Newly
unbundled item \$40.030
1. (Tie) JDA –
Navigation (I) 600 \$0.22 Newly
unbundled item \$40.250
2. SYS –
Separator
Evaluation 599 \$0.950 N/C \$41.20
2. (Tie) SYS –
LGR Model (S) 599 \$0.10 N/C \$41.30
3. JDA – 24-
Hour Spill Tests
(S) 451 \$1.50 New item \$42.80
4. SYS – Spill
Effectiveness/
Optimization 450 \$1.0 N/C \$43.80
5. TDA –
Spillway/Sluice
way Survival (S) 435 \$2.0 N/C in rank,
funding
increased by
\$500 K \$45.80
6. BON PH1
DSM (I) 407 \$4.0 N/C in rank,
funding
increased by
\$1.05 M \$49.80
7. SYS – Adult
PIT (S) 400 \$0.050 N/C \$49.850
8. B2 Fish Unit
Debris Study (I) 390 \$0.20 Newly
unbundled item \$50.050
9. MCN
Extended
Screens (Critical)
(I) 386 \$2.370 N/C in rank,
funding/scope
decreased by
\$2.059 M \$52.420
9. (Tie) MCN
Extended
Screens (Non-
Critical) (I) 386 \$1.30 Newly
unbundled item \$53.720
9. (Tie) BON
Adult Fallback

(S) 386 \$0.30 N/C -\$54.020

10. BON PH1

FGE (S) 380 \$1.80 N/C in rank,
funding

increased by

\$100 K \$55.820

11. MCN-IHB

Adult Fallback

(S) 374 \$0.10 N/C \$55.920

11. (Tie) SYS –

Adult Passage

(Lower Col.)

Placeholder 374 \$1.60 N/C in rank,
funding/scope

reduced by \$450

K \$57.520

12. LGR

Extended

Screens (I) 369 \$0.950 N/C in rank;
funding/scope

reduced by \$384

K \$58.470

13. LGS

Extended

Screens (I) 364 \$1.20 N/C in rank;
funding/scope

reduced by \$955

K \$59.670

14. SYS – Gas

Abatement *

Pending ISAB

Report (S) 360 \$1.830 N/C in rank,
funding/scope

reduced by

\$2.390 M \$61.50

14. (Tie) SYS –

Gas Fastrack (S) 360 \$3.0 N/C in rank;
funding

increased by

\$500 K \$64.50

15. BON Surface

Bypass – High

Flow Outfall

Investigation (S) 357 \$0.90 Newly
unbundled item \$65.40

16. BON Surface

Bypass – B1
Prototype 2nd
Year Test (S) 356 \$4.30 Newly
unbundled item \$69.70
17. BON Surface
Bypass
Behavioral Tests
(S) 355 \$1.50 Newly
unbundled item \$71.20
18. TDA
Emergency Aux.
Water/Outfall
Relocation (I) 352 \$0.50 N/C \$71.70
19. TDA Surface
Bypass
Evaluation 351 \$1.80 N/C in rank;
unbundled from
TDA surface
bypass prototype
design \$73.50
20. SYS – B2
AWS (S) 350 \$0.20 New item \$73.70
20. (Tie) TDA
Surface Bypass
Prototype Design
(S) 350 \$0.90 Unbundled from
Item 19 (above) \$74.60
21. JDA Surface
Bypass Modified
Spillway (S) 345 \$0.140 Newly
unbundled item \$74.740
22. BON PH2
FGE (S) 341 \$1.20 N/C \$75.940
23. JDA Surface
Bypass Spillway
Weir Test (S) 340 \$0.50 Newly
unbundled item \$76.440
23. (Tie) JDA 4-
Unit Skeleton
Bay Study 340 \$0.20 Newly
unbundled item \$76.640
24. LGR Surface
Bypass (Testing
and M&E) (S) 326 \$2.90 Newly
unbundled item \$79.540
25. SYS –

Turbine
Passage/CAM
optimization (S) 320 \$0.250 Newly
unbundled item \$79.790
26. SYS --
Turbine
Passage/BON
MGR Test 316 \$1.40 Newly
unbundled item 81.190
27. SYS --
Turbine
Passage/MCN
(S) 315 \$1.60 Newly
unbundled item \$82.790
28. LGR Surface
Bypass Testing
Additive Items 314 \$1.730 Newly
unbundled item \$84.520
29. JDA JBS
Monitoring/
Juvenile Fish
Improvement (S) 311 \$0.750 Newly
unbundled item \$85.270
30. JDA JBS
Monitoring/
Adult Fish
Improvement (S) 310 \$0.20 Newly
unbundled item \$85.470
31. LCO –
Feasibility (S) 290 \$0.50 N/C \$85.970
32. SYS – AUX
Water – LSN (S) 285 \$0.10 N/C \$86.070
33. BON – Flat
Plate PIT (S) 284 \$0.050 N/C \$86.120
34. SYS – Fish
Ladder Temp.
Control (S) 247 \$0.060 N/C \$86.180
35. JDA –
Ringold (S) 237 \$0.20 N/C \$86.380
36. JDA –
Extended
Screens (S) 215 \$4.30 N/C \$90.680
BON Surface
Bypass – B2
Corner Collector
Tests (S) 0 \$1.50 Newly

unbundled item \$92.180
 BON Surface
 Bypass – B2
 Corner Collector
 Prototype (S) 0 \$1.50 Newly
 unbundled item \$93.680
 BON – Surface
 Bypass B1 Phase
 2 B71 Prototype
 Development (S) 0 \$1.250 Newly
 unbundled item \$94.930
 BON – Surface
 Bypass –
 Guidance
 Curtain
 Investigation (S) 0 \$1.0 Newly
 unbundled item \$95.930
 BON – Surface
 Dewatering 0 \$0.90 Newly
 unbundled item \$96.830
 BON – PH2
 Gatewell
 Cleaning (S) 0 \$0.750 N/C \$97.580
 SYS – Acoustic
 (S) 0 \$1.550 N/C \$99.130
 SYS – Flume
 JDA (S) 0 \$2.30 N/C \$101.430
 SYS – Spill
 Survival (S) 0 \$0.0 N/C \$101.430
 LGR – JBS (I) 0 \$0.40 N/C \$101.830
 MCN – Fish
 Ladder Exit
 Modifications (I) 0 \$0.350 N/C \$102.180
 JDA – Flow
 Deflectors (1 &
 20) (I) 0 \$0.250 N/C \$102.430
 IHB – Flow
 Deflectors Adult
 Evaluation 0 \$0.20 Newly
 unbundled item \$102.630

Most of the changes made to the spreadsheet took the form of additions, individual line-items added as a result of the unbundling of larger “umbrella” projects. Few if any changes were made to the relative ranking of existing line-items. It was agreed to schedule a special half-day SCT meeting to work intensively on these rankings on Wednesday, September 30. Silverberg asked all SCT members to come to the September 30 meeting with any recommended changes to

the existing rankings, and to be prepared to discuss the reasons for those changes.

IV. Next SCT Meeting Date and Agenda Items.

The next meeting of the System Configuration Team, to continue the discussion of FY'99 CRFM project prioritizations, was set for Wednesday, September 30, from 1:30-4 p.m. Additional SCT meetings were set for Monday, October 5 and Wednesday-Thursday, October 21-22. Meeting notes prepared by Jeff Kuechle, BPA contractor.